

DETAILED ACTION

1. Acknowledgement is made of Applicant's amendment, which was received by the Office on October 16, 2008. Claims 1-27 were previously cancelled. Claims 36-53 are new and have been added. Claims 28-53 are pending.

Response to Arguments

2. Applicant's arguments with respect to Claims 28-35 have been fully considered and are persuasive (see pages 8-11 of the Remarks filed October 16, 2008). Accordingly, the rejections of Claims 28-35 under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (U.S. 2005/0080460) in view of Judy (U.S. 2005/0203429) of July 24, 2008 have been withdrawn.

EXAMINER'S AMENDMENT

3. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with Derrick W. Reed on January 7, 2008.

The application has been amended as follows:

In Claim 28, line 1, immediately after "A system for evaluating", -- progression of -- was inserted.

In Claim 28, line 4, immediately after "representative of ventricular EDV;"; "and" was deleted.

In Claim 28, lines 5-17 were deleted in their entirety and replaced with the following:

wherein the system is coupled to at least two electrodes configured for implant within the patient's ventricles and wherein the EDV detection unit is adapted to:

(i.) identify a baseline point in time within each of a plurality of cardiac cycles for detecting the values representative of ventricular EDV, wherein the baseline point in time within each of the plurality of cardiac cycles is identified by tracking a pre-ejection interval and then selecting a point in time within the pre-ejection interval;

(ii.) detect a signal representative of an impedance between the two ventricular electrodes at each baseline point in time; and

(iii.) determine a baseline ventricular EDV value based on the impedance signal detected at each baseline point in time; and

wherein the system further comprises a ventricular EDV-based heart failure evaluation unit operative to detect progression of heart failure within the patient based on detecting changes, if any, over time in the baseline ventricular EDV values.

In Claim 32, line 1, immediately after "A system for", "detecting the" was deleted and -- tracking -- was inserted.

In Claim 32, line 3, immediately after "end-diastolic volume (EDV) values;"; "and" was deleted.

In Claim 32, lines 4-15 were deleted in their entirety and replaced with the following:

wherein the means for determining ventricular EDV values is coupled to at least two electrodes configured for implant within the patient's ventricles and comprises:

(i.) means for identifying a baseline point in time within each of a plurality of cardiac cycles for detecting the ventricular EDV values, wherein the baseline point in time within each of the plurality of cardiac cycles is identified by tracking a pre-ejection interval and then selecting a point in time within the pre-ejection interval;

(ii.) means for detecting a signal representative of an impedance between the at least two ventricular electrodes at each baseline point in time; and

(iii.) means for determining a baseline ventricular EDV values based on the impedance signal detected at each baseline point in time; and

wherein the system further comprises means for tracking progression of heart failure, if any, within the patient based on detecting changes, if any, over time in the baseline ventricular EDV values.

In Claim 33, line 2, immediately after “based on progression of heart failure”, -- within the patient -- was inserted.

In Claim 34, line 2, immediately after “based on progression of heart failure”, -- within the patient -- was inserted.

In Claim 35, line 2, immediately after “based on progression of heart failure”, -- within the patient -- was inserted.

In Claim 36, at the beginning of line 2, “adapted” was deleted and -- further adapted -- was inserted.

In Claim 40, at the beginning of line 3, “changes, if any,” was deleted and -- determining changes, if any, -- was inserted.

In Claim 41, line 2, immediately after “in heart failure by comparing”, -- the -- was inserted.

In Claim 42, line 2, immediately after “unit is”, -- further -- was inserted.

In Claim 43, at the beginning of line 2, “adapted” was deleted and -- further adapted -- was inserted.

In Claim 44, at the beginning of line 2, “adapted” was deleted and -- further adapted -- was inserted.

In Claim 53, line 2, immediately after "controller", "delivering therapy" was deleted.

Allowable Subject Matter

4. Claims 28-53 are allowed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JESSICA REIDEL whose telephone number is (571)272-2129. The Examiner can normally be reached on Monday - Friday, 8:00 AM - 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Carl H. Layno can be reached on (571)272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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3766